

CLAIMS

1. An intermetallic material, consisting of the following composition (% by weight): 8-15% Al, 15-25%
5 Cr, 20-40% Co, 0-5% Ta, 0-0.03% La, 0-0.5% Y, 0-1.5% Si, 0-1% Hf, 0-0.2% Zr, 0-0.2% B, 0-0.1% C, 0-4% Fe, remainder Ni and inevitable impurities.

2. The intermetallic material as claimed in claim 1,
10 consisting of the following composition (% by weight): 12% Al, 22% Cr, 36% Co, 0.2% Y, 0.2% Hf, 3% Fe, remainder Ni and inevitable impurities.

3. The intermetallic material as claimed in claim 1,
15 consisting of the following composition (% by weight): 10% Al, 22% Cr, 36% Co, 0.2% Y, 0.2% Hf, 2% Ta, 3% Fe, remainder Ni and inevitable impurities.

4. The use of the intermetallic material as claimed
20 in one of claims 1 to 3 as a high-temperature coating (15) in thermal turbomachines.

5. The use of the intermetallic material as claimed
25 in one of claims 1 to 3 as a felt on components which are subject to friction in thermal turbomachines.

6. The use of the intermetallic felt as claimed in
claim 5, characterized in that the intermetallic felt is arranged on a rotor (4, 4a) or stator (4, 4b).

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7. The use of the intermetallic felt as claimed in
claim 5, characterized in that the component (1, 8) is a turbine blade or vane (1), and the tip (11) of the turbine blade or vane (1) is equipped with an
35 intermetallic felt (2).

8. The use of the intermetallic felt as claimed in

claim 5, characterized in that the component (1, 8) is a turbine blade or vane (1) and the platform (12) of the turbine blade or vane (1) is equipped with an intermetallic felt (2).

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9. The use of the intermetallic felt as claimed in claim 5, characterized in that the component (1, 8) is a heat shield segment (8) made partially or completely from an intermetallic felt (2).

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10. The use of the intermetallic felt as claimed in one of claims 5 to 8, characterized in that the intermetallic felt (2) is covered with a ceramic material (3).

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11. The use of the intermetallic felt as claimed in claim 5, characterized in that the felt is used on components which are subject to vibration in thermal turbomachines.